

Dr. Duke's Phytochemical and Ethnobotanical Database

Chemicals Found in *Capsicum annuum*

| Activity Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|----------------|---|------------|---------|----------|--------|--------------------|
| 0 | 1,1-DIETHOXY-2-METHYLPROPANE | Fruit | -- | -- | | |
| 0 | 1,1-DIETHOXY-3-METHYLBUTANE | Fruit | -- | -- | | |
| 0 | 1-HEXANOL | Fruit | -- | -- | | |
| 0 | 1-HYDROXY-PROPAN-2-ONE | Fruit | -- | -- | | |
| 0 | 1-METHYLPYRROLE-KETONE | Fruit | -- | -- | | |
| 0 | 1-O-CAFFEOYL-BETA-D-GLUCOSE | Fruit | -- | -- | | |
| 0 | 1-O-FERRULOYL-BETA-D-GLUCOSE | Fruit | -- | -- | | |
| 0 | 13-CIS-CAPSANTHIN | Fruit | -- | 205 | | |
| 0 | 13-CIS-ZEAXANTHIN | Fruit | 2 | 43 | | |
| 0 | 15-CIS-ZEAXANTHIN | Fruit | -- | 9 | | |
| 0 | 2,3,5-TRIMETHYL PYRAZINE | Fruit | -- | -- | | |
| 0 | 2,3-BUTANEDIOL | Fruit | -- | -- | | |
| 0 | 2,3-DIMETHYL-5-ETHYL PYRAZINE | Fruit | -- | -- | | |
| 0 | 2,3-DIMETHYL-PYRAZINE | Fruit | -- | -- | | |
| 0 | 2-BUTANONE | Fruit | -- | -- | | |
| 0 | 2-HEXANOL | Fruit | -- | -- | | |
| 0 | 2-HEXANONE | Fruit | -- | -- | | |
| 0 | 2-HYDROXY-3-METHYL-CYCLOPENT-2-EN-1-ONE | Fruit | -- | -- | | |

| Activity Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|----------------|--|------------|---------|----------|--------|--------------------|
| 0 | 2-METHOXY-3-ISOBUTYL-PYRAZINE | Fruit | -- | -- | | |
| 0 | 2-METHYL-5-ETHYL PYRAZINE | Fruit | -- | -- | | |
| 0 | 2-METHYL-BUTAN-1-OL | Fruit | -- | -- | | |
| 0 | 2-METHYL-BUTAN-2-OL | Fruit | -- | -- | | |
| 0 | 2-METHYL-BUTANAL | Fruit | -- | -- | | |
| 0 | 2-METHYL-BUTYRIC-ACID | Fruit | -- | -- | | |
| 0 | 2-METHYL-PENTAN-2-OL | Fruit | -- | -- | | |
| 0 | 2-METHYL-PROPANAL | Fruit | -- | -- | | |
| 0 | 2-METHYL-PROPIONIC-ACID | Fruit | -- | -- | | |
| 0 | 2-PENTYL-FURAN | Fruit | -- | -- | | |
| 0 | 2-PENTYL PYRIDINE | Fruit | -- | -- | | |
| 0 | 24-(R)-ETHYL-LOPHENOL | Seed | -- | -- | | |
| 0 | 24-DIHYDROLANOSTEROL | Seed | -- | -- | | |
| 0 | 24-METHYL-LANOST-9(11)-EN-3-BETA-OL | Seed | -- | -- | | |
| 0 | 24-METHYL-LOPHENOL | Seed | -- | -- | | |
| 5 | 24-METHYLENE-CYCLOARTANOL | Seed | -- | -- | | |
| 0 | 3'-O-MYRISTOYL CAPSANTHIN | Fruit | -- | -- | | |
| 0 | 3,6-EPOXIDE-5-HYDROXY-5,6-DIHYDRO-ZEAXANTHIN | Fruit | -- | -- | | |
| 0 | 3-(SEC-BUTYL)-2-METHOXYPYRAZINE | Fruit | -- | -- | | |

| Activity Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|-----------------------|-------------------------------------|-------------------|----------------|-----------------|---------------|--|
| 0 | 3-HEXANOL | Fruit | -- | -- | | |
| 0 | 3-HYDROXY-ALPHA-CAROTENE | Fruit | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 0 | 3-ISOBUTYL-2-METHOXYPYRAZINE | Fruit | -- | -- | | |
| 0 | 3-ISOPROPYL-2-METHOXYPYRAZINE | Fruit | -- | -- | | |
| 0 | 3-METHYL-1-PENTYL-3-METHYL-BUTYRATE | Fruit | -- | -- | | Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980. |
| 0 | 3-METHYL-BUTANAL | Fruit | -- | -- | | |
| 0 | 3-METHYL-BUTYRIC-ACID | Fruit | -- | -- | | |
| 0 | 3-METHYL-CYCLOPENT-2-EN-1-ONE | Fruit | -- | -- | | |
| 0 | 3-METHYL-PENTAN-3-OL | Fruit | -- | -- | | |
| 0 | 31-NOR-LANOST-8-EN-3-BETA-OL | Seed | -- | -- | | |
| 0 | 31-NOR-LANOST-9(11)-EN-3-BETA-OL | Seed | -- | -- | | |
| 0 | 31-NOR-LANOSTEROL | Seed | -- | -- | | |
| 0 | 31-NORCYCLOARTANOL | Seed | -- | -- | | |

| Activity Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|----------------|---|------------|---------|----------|--------|--|
| 0 | 4-ALPHA-14-ALPHA-24-TRIMETHYL-CHOLESTA-8(24)-DIEN-3-BETA-OL | Seed | -- | -- | | |
| 0 | 4-ALPHA-24-DIMETHYL-CHOLESTA-7,24-DIEN-3-BETA-OL | Seed | -- | -- | | |
| 0 | 4-ALPHA-METHYL-24-ETHYL-CHOLESTA-7,24-DIEN-3-BETA-OL | Seed | -- | -- | | |
| 0 | 4-ALPHA-METHYL-5-ALPHA-CHOLEST-8(14)-EN-3-BETA-OL | Seed | -- | -- | | |
| 0 | 4-ETHYL-GUAIACOL | Fruit | -- | -- | | |
| 0 | 4-METHYL-1-PENTYL-2-METHYL-BUTYRATE | Fruit | -- | -- | | Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980. |
| 0 | 4-METHYL-3-PENTEN-2-ONE | Fruit | -- | -- | | |
| 0 | 4-METHYL-GUAIACOL | Fruit | -- | -- | | |
| 0 | 4-METHYL-HEPTADECANE | Fruit | -- | -- | | |
| 0 | 4-METHYL-HEXADECANE | Fruit | -- | -- | | |
| 0 | 4-METHYL-PENTANOIC-ACID | Fruit | -- | -- | | |
| 0 | 4-METHYLPENTADECANE | Fruit | -- | -- | | Chemical Constituents of Oriental Herbs (3 diff. books) |
| 0 | 4-METHYLTETRADECANE | Fruit | -- | -- | | Chemical Constituents of Oriental Herbs (3 diff. books) |

| Activity Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|----------------|--------------------------------------|------------|---------|----------|--------------------|--|
| 0 | 4-METHYLTRIDECANE | Fruit | -- | -- | | Chemical Constituents of Oriental Herbs (3 diff. books) |
| 0 | 5,6-DIHYDROXY-5,6-DIHYDRO-ZEAXANTHIN | Fruit | -- | -- | | |
| 0 | 5-ALPHA-CHOLEST-8(14)-EN-3-BETA-OL | Seed | -- | -- | | |
| 0 | 5-HYDROXY-CAPSANTHIN-3,6-EPOXIDE | Fruit | -- | -- | | |
| 0 | 5-HYDROXY-CAPSANTHIN-5,6-EPOXIDE | Fruit | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 0 | 5-HYDROXYCAPSANTHIN | Fruit | -- | -- | | Jim Duke's personal files. |
| 0 | 5-METHYL-2-FURFURAL | Fruit | -- | -- | | |
| 0 | 5-METHYL-FURFURAL | Fruit | -- | -- | | |
| 0 | 9-CIS-CAPSANTHIN | Fruit | 0.5 | 140 | | |
| 0 | 9-CIS-ZEAXANTHIN | Fruit | 2 | 32 | | |
| 16 | ACETIC-ACID | Fruit | -- | -- | | |
| 0 | ACETOIN | Fruit | -- | -- | | |
| 19 | ACETYL-CHOLINE | Pericarp | -- | 15 | -1 | |
| 19 | ACETYL-CHOLINE | Seed | -- | 105 | 0.5835650056778248 | |
| 0 | ACETYLFURAN | Fruit | -- | -- | | |

| Activity Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|----------------|----------------------|------------|---------|----------|---------------------|------------------------------------|
| 3 | ALANINE | Fruit | 350 | 4774 | 0.41916448807939843 | |
| 7 | ALPHA-CAROTENE | Fruit | 0.2 | 20 | 2.436266539567189 | |
| 0 | ALPHA-COPAENE | Fruit | -- | -- | | |
| 2 | ALPHA-CRYPTOXANTHIN | Plant | -- | -- | | |
| 2 | ALPHA-CRYPTOXANTHIN | Fruit | 1 | 25 | | |
| 15 | ALPHA-LINOLENIC-ACID | Fruit | 220 | 3001 | 0.20656945687815753 | USDA's Ag Handbook 8 and sequelae) |
| 11 | ALPHA-PHELLANDRENE | Fruit | -- | -- | | |
| 28 | ALPHA-PINENE | Fruit | -- | -- | | |
| 23 | ALPHA-TERPINEOL | Fruit | -- | -- | | |
| 0 | ALPHA-THUJENE | Fruit | -- | -- | | |
| 32 | ALPHA-TOCOPHEROL | Fruit | 22 | 284 | 3.249804110897653 | |
| 5 | ALUMINUM | Fruit | -- | -- | | |
| 0 | AMMONIA | Fruit | 382 | 382 | 1 | |
| 0 | AMMONIA(NH3) | Fruit | -- | 382 | | |
| 1 | ANTHERAXANTHIN | Fruit | 0.5 | 165 | | |

| Activity Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|----------------|----------------|------------|---------|----------|----------------------|--|
| 4 | APIIN | Fruit | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 0 | ARACHIDIC-ACID | Fruit | -- | -- | | Chemical Constituents of Oriental Herbs (3 diff. books) |
| 14 | ARGININE | Fruit | 410 | 5592 | 0.34202092362066183 | USDA's Ag Handbook 8 and sequelae) |
| 2 | ARSENIC | Fruit | 0.004 | 0.015 | -0.5177009203400424 | |
| 112 | ASCORBIC-ACID | Fruit | 230 | 20982 | 1.0201086559741077 | |
| 0 | ASH | Fruit | 13416 | 52000 | -0.12076969079664142 | |
| 2 | ASPARAGINE | Fruit | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 3 | ASPARTIC-ACID | Fruit | 1200 | 16504 | 0.8336382798513058 | |

| Activity Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|----------------|-----------------------|------------|---------|----------|----------------------|--|
| 0 | AUROCHROME | Fruit | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 0 | AUROXANTHIN-1 | Fruit | -- | 0.5 | | |
| 0 | AUROXANTHIN-2 | Fruit | -- | 0.5 | | |
| 0 | BARIUM | Fruit | 2 | 8 | -0.8930759463364307 | |
| 1 | BEHENIC-ACID | Fruit | -- | -- | | Chemical Constituents of Oriental Herbs (3 diff. books) |
| 24 | BENZALDEHYDE | Fruit | -- | -- | | |
| 9 | BETA-AMYRIN | Seed | -- | -- | | |
| 0 | BETA-APO-8'-CAROTENAL | Fruit | -- | -- | | |
| 53 | BETA-CAROTENE | Fruit | 25 | 95 | 0.032832659233001486 | |
| 0 | BETA-CAROTENE-EPOXIDE | Fruit | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 2 | BETA-CRYPTOXANTHIN | Fruit | 1 | 510 | 1 | |
| 13 | BETA-PINENE | Fruit | -- | -- | | |

| Activity Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|----------------|------------------|----------------|---------|----------|---------------------|---|
| 47 | BETA-SITOSTEROL | Plant | -- | -- | | |
| 47 | BETA-SITOSTEROL | Fruit | 60 | 1190 | 0.7692772928142692 | |
| 14 | BETAINE | Fruit | -- | -- | | Chemical Constituents of Oriental Herbs (3 diff. books) |
| 4 | BORON | Fruit | 1 | 18 | 0.6859947425378856 | |
| 0 | BROMINE | Fruit | 0.1 | 111 | 3.331516857208814 | ACTA AGRIC SCAND SUPPL 22: 1980 |
| 0 | BUTANAL-2-METHYL | Fruit | -- | -- | | |
| 0 | BUTANAL-3-METHYL | Fruit | -- | -- | | |
| 0 | BUTANE-1,3-DIOL | Fruit | -- | -- | | |
| 0 | BUTANE-2,3-DIOL | Fruit | -- | -- | | |
| 3 | CADMIUM | Fruit | 0.005 | 0.33 | 0.32622088213907097 | |
| 102 | CAFFEIC-ACID | Fruit | 11 | 11 | -0.3368770543074836 | |
| 28 | CALCIUM | Fruit | 431 | 1670 | -0.5045082674838655 | |
| 2 | CAMPESTEROL | Fruit | 20 | 530 | 3.841640034312409 | |
| 9 | CAMPHENENE | Fruit | -- | -- | | |
| 44 | CAPSAICIN | Fruit | 100 | 4000 | -1 | |
| 44 | CAPSAICIN | Tissue Culture | 0.59 | 590 | | |

| Activity Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|----------------|------------------------|---------------------|---------|----------|--------|---|
| 44 | CAPSAICIN | Resin, Exudate, Sap | 634000 | 634000 | | |
| 2 | CAPSANTHIN | Fruit | 1 | 2820 | | |
| 0 | CAPSANTHIN-3,6-EPOXIDE | Fruit | -- | 165 | | |
| 0 | CAPSANTHIN-5,6-EPOXIDE | Fruit | -- | 185 | | |
| 0 | CAPSANTHONE | Fruit | -- | 45 | | |
| 0 | CAPSIAMIDE | Fruit | 20 | 200 | | Chemical Constituents of Oriental Herbs (3 diff. books) |
| 0 | CAPSIAMIDE | Plant | -- | -- | | |
| 1 | CAPSIANOSIDE-A | Fruit | 33 | 250 | | |
| 0 | CAPSIANOSIDE-B | Fruit | 2 | 18 | | |
| 1 | CAPSIANOSIDE-C | Fruit | 35 | 103 | | |
| 1 | CAPSIANOSIDE-D | Fruit | 21 | 38 | | |
| 0 | CAPSIANOSIDE-E | Fruit | 15 | -- | | |
| 0 | CAPSIANOSIDE-F | Fruit | 5 | -- | | |
| 1 | CAPSIANOSIDE-I | Fruit | 18 | 18 | | |
| 0 | CAPSIANOSIDE-II | Fruit | 43 | 138 | | |
| 0 | CAPSIANOSIDE-III | Fruit | 15 | 105 | | |
| 0 | CAPSIANOSIDE-IV | Fruit | 9 | 9 | | |

| Activity Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|----------------|-----------------|------------|---------|----------|--------|--|
| 0 | CAPSIANOSIDE-V | Fruit | 2 | 2 | | |
| 0 | CAPSIANSIDE-A | Fruit | 300 | 300 | | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. |
| 0 | CAPSICOSIDE | Leaf | -- | -- | | |
| 0 | CAPSICOSIDE | Plant | -- | -- | | |
| 0 | CAPSICOSIDE | Seed | -- | -- | | |
| 0 | CAPSICOSIDE A-2 | Root | -- | -- | | |
| 0 | CAPSICOSIDE A-3 | Root | -- | -- | | |
| 0 | CAPSICOSIDE B-2 | Root | -- | -- | | |
| 0 | CAPSICOSIDE C-2 | Root | -- | -- | | |
| 0 | CAPSICOSIDE C-3 | Root | -- | -- | | |
| 0 | CAPSICOSIDE E | Root | -- | -- | | |
| 0 | CAPSICOSIDE-A-1 | Root | 530 | 530 | | |
| 0 | CAPSICOSIDE-B-1 | Root | 620 | 620 | | |
| 0 | CAPSICOSIDE-C-1 | Root | 600 | 600 | | |
| 0 | CAPSICOSIN | Plant | -- | -- | | |
| 3 | CAPSIDIOL | Fruit | 29 | 29 | | |

| Activity Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|----------------|------------------|----------------|---------|----------|---------------------|--|
| 3 | CAPSIDIOL | Tissue Culture | -- | -- | | |
| 0 | CAPSOCHROME | Fruit | -- | -- | | |
| 0 | CAPSOLUTEIN | Fruit | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 1 | CAPSORUBIN | Fruit | -- | 260 | | |
| 0 | CARBOHYDRATES | Fruit | 175956 | 682000 | -0.539466174742496 | |
| 0 | CARNAUBIC-ACID | Seed | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 0 | CAROTENOIDS | Fruit | 115 | 9945 | 1.9104197137381895 | |
| 31 | CARYOPHYLLENE | Fruit | -- | -- | | |
| 77 | CHLOROGENIC-ACID | Fruit | -- | -- | | |
| 77 | CHLOROGENIC-ACID | Leaf | -- | -- | | |
| 21 | CHLOROPHYLL | Fruit | -- | 195 | 0.22124854097919466 | |
| 20 | CHOLINE | Pericarp | 297 | 297 | -1 | |

| Activity Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|----------------|----------------------------|----------------|---------|----------|---------------------|--|
| 20 | CHOLINE | Seed | 360 | 360 | -1.2352144104006983 | |
| 24 | CHROMIUM | Fruit | -- | -- | -0.5076332138804538 | |
| 18 | CINNAMIC-ACID | Tissue Culture | -- | -- | | |
| 0 | CIS-13'-CAPSANTHIN | Fruit | -- | -- | | |
| 0 | CIS-9'-CAPSANTHIN | Fruit | -- | -- | | |
| 0 | CIS-9,10-DIHYDRO-CAPSENONE | Tissue Culture | 1 | 1 | | |
| 0 | CIS-BETA-CAROTENE | Fruit | 1 | 60 | | |
| 0 | CIS-CRYPTOXANTHIN | Fruit | -- | 65 | | |
| 23 | CITRIC-ACID | Fruit | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 1 | CITROSTADIENOL | Seed | -- | -- | | |
| 0 | CITROXANTHIN | Fruit | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |

| Activity Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|----------------|--------------------|------------|---------|----------|--------------------|--|
| 0 | CITRULLIN | Fruit | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 2 | COBALT | Fruit | 4 | 15.1 | 1.2928795988960315 | |
| 12 | COPPER | Fruit | 0.5 | 20 | 0.5588968590110831 | |
| 0 | CRYPTOCAPSIN | Fruit | 0.2 | 75 | | |
| 2 | CRYPTOXANTHIN | Fruit | -- | -- | | |
| 0 | CUCURBITACHROME | Fruit | -- | 400 | | |
| 0 | CUCURBITAXANTHIN-A | Fruit | 1 | 610 | | |
| 0 | CUCURBITAXANTHIN-B | Fruit | -- | 110 | | |
| 0 | CYCLOARTANOL | Seed | -- | -- | | |
| 7 | CYCLOARTENOL | Seed | -- | -- | | |
| 3 | CYCLOEUCALENOL | Seed | -- | -- | | |
| 0 | CYCLOHEXANONE | Fruit | -- | -- | | |
| 0 | CYCLOPENTANOL | Fruit | -- | -- | | |
| 0 | CYCLOVIOLAXANTHIN | Fruit | -- | 70 | | |
| 3 | CYNAROSIDE | Leaf | -- | -- | | |

| Activity Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|----------------|---------------------------------|---------------------------|---------|----------|---------------------|------------------------------------|
| 2 | CYSTINE | Fruit | 160 | 2182 | 1.2003774411002974 | USDA's Ag Handbook 8 and sequelae) |
| 0 | DECANOIC-ACID-VANILLYLAMIDE | Fruit | 1 | 68 | | USDA's Ag Handbook 8 and sequelae) |
| 0 | DEHYDROASCORBIC-ACID | Fruit | 20000 | 20000 | 1.725773620676355 | |
| 8 | DELTA-3-CARENE | Fruit | -- | -- | | |
| 0 | DI-N-PROPYL-AMINE | Fruit | 0.3 | 0.3 | | |
| 1 | DIHYDROCAPSAICIN | Fruit | 75 | 1628 | | |
| 1 | DIHYDROCAPSAICIN | Resin, Exudate, Sap | 328000 | 318000 | | |
| 1 | DIHYDROCAPSAICIN | Tissue Culture | -- | -- | | |
| 0 | DIMETHOXY-BENZYL METHYLOCTAMIDE | Resin, Exudate, Sap | -- | -- | | |
| 0 | DIN-N-PROPYL-AMINE | Fruit | -- | 0.3 | | |
| 0 | EO | Fruit | 1290 | 5000 | -0.7227768403857732 | |
| 1 | EPSILON-CAROTENE | Fruit | -- | -- | | |

| Activity Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|----------------|------------------------|------------|---------|----------|---------------------|--|
| 0 | ERIODICTIN | Fruit | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 0 | ETHYL-3-METHYLBUTYRATE | Fruit | -- | -- | | |
| 6 | ETHYL-ACETATE | Fruit | -- | -- | | |
| 76 | EUGENOL | Fruit | -- | -- | | |
| 0 | FAT | Fruit | 2000 | 144000 | 0.4586083273000108 | |
| 0 | FAT | Seed | 100000 | 150000 | -0.6077877171137942 | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 15 | FIBER | Fruit | 12000 | 351000 | 1.975278288083942 | |
| 0 | FIBER(CRUDE) | Fruit | -- | 258000 | 1.530775468007022 | |
| 0 | FIBER(DIETARY) | Fruit | -- | 482000 | 1.7052471143322203 | |
| 0 | FLUORINE | Fruit | 0.05 | 1 | -0.3491724883530834 | ACTA AGRIC SCAND SUPPL 22: 1980 |
| 15 | FOLACIN | Fruit | -- | 3 | 0.3894543457310426 | USDA's Ag Handbook 8 and sequelae) |

| Activity Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|----------------|---------------------|------------|---------|----------|--------|--|
| 0 | FOLIAXANTHIN | Fruit | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 0 | FUNKIOSIDE | Root | -- | -- | | |
| 0 | FUNKIOSIDE C | Root | -- | -- | | |
| 0 | GALACTOSAMINE | Fruit | -- | -- | | |
| 1 | GALACTOSE | Fruit | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 0 | GAMMA-BUTYROLACTONE | Fruit | -- | -- | | |
| 11 | GAMMA-TERPINENE | Fruit | -- | -- | | |
| 1 | GLUCOSAMINE | Fruit | -- | -- | | |
| 7 | GLUCOSE | Fruit | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |

| Activity Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|----------------|---------------|------------|---------|----------|---------------------|--|
| 8 | GLUTAMIC-ACID | Fruit | 1120 | 15277 | 0.15870222657295222 | USDA's Ag Handbook 8 and sequelae) |
| 0 | GLUTAMINASE | Fruit | -- | -- | | |
| 12 | GLYCINE | Fruit | 310 | 4228 | 0.24116126345948113 | |
| 0 | GRAMISTEROL | Seed | -- | -- | | |
| 0 | GROSSAMIDE | Root | 3 | 3 | | |
| 18 | GUAIACOL | Fruit | -- | -- | | |
| 0 | HENEICOSANE | Fruit | -- | -- | | Chemical Constituents of Oriental Herbs (3 diff. books) |
| 0 | HEPTADECANE | Fruit | -- | -- | | Chemical Constituents of Oriental Herbs (3 diff. books) |
| 31 | HESPERIDIN | Fruit | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 0 | HEXADECANE | Fruit | -- | -- | | Chemical Constituents of Oriental Herbs (3 diff. books) |
| 0 | HEXAN-1-AL | Fruit | -- | -- | | |

| Activity Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|----------------|---|---------------------|---------|----------|----------------------|--|
| 5 | HEXANAL | Fruit | -- | -- | | Chemical Constituents of Oriental Herbs (3 diff. books) |
| 2 | HEXANOIC-ACID | Fruit | -- | -- | | |
| 7 | HISTIDINE | Fruit | 170 | 2319 | 0.4251522813518472 | |
| 0 | HOMOCAPSAICIN | Fruit | 2 | 90 | | |
| 0 | HOMOCAPSAICIN | Resin, Exudate, Sap | 3000 | 3000 | | |
| 0 | HOMODIHYDROCAPSAICIN | Fruit | 2 | 90 | | |
| 0 | HOMODIHYDROCAPSAICIN | Resin, Exudate, Sap | -- | -- | | |
| 0 | HYDROXY-ALPHA-CAROTENE | Fruit | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 0 | HYDROXY-BENZOIC-ACID-4-BETA-D-GLUCOSIDE | Fruit | -- | -- | | |
| 6 | IRON | Fruit | 4 | 14 | -0.47195395604815815 | |

| Activity Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|----------------|-----------------------|------------|---------|----------|----------------------|--|
| 0 | ISOHEXYL-ISOCAPROATE | Fruit | -- | -- | | Leung, A.Y., Encyclopedia of Common Natural Ingredients Used in Food, Drugs, and Cosmetics, John Wiley & Sons, New York, 1980. |
| 3 | ISOLEUCINE | Fruit | 270 | 3683 | 0.013574129648896245 | USDA's Ag Handbook 8 and sequelae) |
| 0 | KARPOXANTHIN | Fruit | 0.5 | 150 | | |
| 4 | L-ASPARAGINASE | Fruit | -- | -- | | |
| 0 | L-ASPARARGINASE | Fruit | -- | -- | | |
| 0 | LANOST-8-EN-3-BETA-OL | Seed | -- | -- | | |
| 0 | LANOSTENOL | Plant | -- | -- | | J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991. |
| 1 | LANOSTEROL | Seed | -- | -- | | |
| 0 | LATOXANTHIN | Fruit | 1 | 25 | | |
| 0 | LEAD | Fruit | 0.004 | 2 | -0.3720390542711243 | |
| 2 | LEUCINE | Fruit | 440 | 6002 | 0.19151009080138937 | USDA's Ag Handbook 8 and sequelae) |
| 3 | LIGUSTRAZINE | Fruit | -- | -- | | |
| 60 | LIMONENE | Fruit | -- | -- | | |
| 0 | LINALOL | Fruit | -- | -- | | |

| Activity Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|----------------|---------------------------------|------------|---------|----------|---------------------|---------------------------------------|
| 53 | LINALOOL | Fruit | -- | -- | | |
| 27 | LINOLEIC-ACID | Fruit | 2190 | 29871 | 0.06603462603214637 | |
| 0 | LINOLENIC-ACID | Fruit | -- | -- | | |
| 11 | LITHIUM | Fruit | 0.284 | 0.4 | -0.5556718414322324 | |
| 0 | LOPHENOL | Seed | -- | -- | | |
| 21 | LUPEOL | Seed | -- | -- | | |
| 15 | LUTEIN | Fruit | 3.4 | 50 | 3.4855553704728424 | |
| 78 | LUTEOLIN | Fruit | 11 | 11 | | |
| 0 | LUTEOLIN-7-O-BETA-APIOGLUCOSIDE | Leaf | -- | -- | | |
| 0 | LUTEOLIN-7-O-BETA-D-DIGLUCOSIDE | Leaf | -- | -- | | |
| 0 | LUTEOLIN-7-O-BETA-D-GLUCOSIDE | Leaf | -- | -- | | |
| 0 | LUTEOLIN-7-O-BETA-DIGLUCOSIDE | Leaf | -- | -- | | |
| 0 | LUTEOXANTHIN-1 | Fruit | 2 | 40 | | |
| 0 | LUTEOXANTHIN-2 | Fruit | 7 | 110 | | |
| 4 | LYSINE | Fruit | 380 | 5183 | 0.27674261896008856 | USDA's Ag Handbook 8 and sequelae) |
| 65 | MAGNESIUM | Fruit | 604 | 2340 | 0.0973640583480707 | |

| Activity Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|----------------|-----------------|------------|---------|----------|----------------------|--|
| 1 | MALONIC-ACID | Fruit | -- | -- | | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 1 | MALONIC-ACID | Leaf | -- | -- | | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |
| 11 | MALTOL | Fruit | -- | -- | | |
| 14 | MANGANESE | Fruit | 0.4 | 1.4 | -0.39430607258501055 | |
| 0 | MARGARIC-ACID | Fruit | -- | -- | | Chemical Constituents of Oriental Herbs (3 diff. books) |
| 1 | MERCURY | Fruit | 0.001 | 0.001 | -0.7865389313824043 | |
| 15 | METHIONINE | Fruit | 100 | 1364 | 0.49932054232266115 | USDA's Ag Handbook 8 and sequelae) |
| 2 | MOLYBDENUM | Fruit | -- | 15 | 2.521090498809608 | |
| 0 | MUTATOXANTHIN-1 | Fruit | -- | 40 | | |
| 0 | MUTATOXANTHIN-2 | Fruit | 0.5 | 295 | | |
| 22 | MYRCENE | Fruit | -- | -- | | |
| 34 | MYRICETIN | Fruit | 1 | 1 | -0.6882411791853533 | |

| Activity Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|----------------|----------------------------------|---------------------------|---------|----------|--------------------|--------------------|
| 6 | MYRISTIC-ACID | Fruit | 10 | 136 | -0.262727790139001 | |
| 0 | N-(13-METHYLtetradecyl)acetamide | Fruit | 300 | 400 | | |
| 0 | N-CIS-FERULOYL-TYRAMINE | Root | 2 | 2 | | |
| 0 | N-HEXANAL | Fruit | -- | -- | | |
| 0 | N-METHYL-ANILINE | Fruit | 13.1 | 13.1 | | |
| 0 | N-NITROSO-DIMETHYLAMINE | Fruit | -- | -- | | |
| 0 | N-NITROSO-PYRROLIDINE | Fruit | -- | -- | | |
| 0 | N-PENTYL-AMINE | Fruit | 3 | 3 | 0.9999999999999997 | |
| 0 | N-PROPYL-AMINE | Fruit | 2.3 | 2.3 | | |
| 0 | N-TRANS-FERULOYL-OCTOPAMINE | Root | 1 | 2 | | |
| 0 | N-TRANS-FERULOYL-TYRAMINE | Root | 12 | 12 | | |
| 0 | N-TRANS-P-COUMAROYL-OCTOPAMINE | Root | 1 | 1 | | |
| 0 | N-TRANS-P-COUMAROYL-TYRAMINE | Root | 2 | 2 | | |
| 0 | N-VANILLYL-N-NONAMIDE | Resin, Exudate, Sap | -- | -- | | |
| 1 | NAPHTHALENE | Fruit | -- | -- | | |
| 0 | NEO-BETA-CAROTENE | Plant | -- | -- | | |
| 2 | NEOXANTHIN | Fruit | -- | 18 | 1 | |
| 0 | NH3 | Fruit | 382 | 382 | | |

| Activity Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|----------------|-----------------------------|---------------------|---------|----------|---------------------|---|
| 39 | NIACIN | Fruit | 21 | 80 | 0.25803272913297753 | |
| 3 | NICKEL | Fruit | 0.05 | 5.5 | 0.893202335058218 | |
| 0 | NITROGEN | Fruit | 1900 | 23330 | 0.6105662880376689 | ACTA AGRIC SCAND SUPPL 22: 1980 |
| 0 | NONADECANE | Fruit | -- | -- | | Chemical Constituents of Oriental Herbs (3 diff. books) |
| 0 | NONANOIC-ACID-VANILLYLAMIDE | Fruit | 2 | 45 | | |
| 0 | NONIVAMIDE | Resin, Exudate, Sap | -- | -- | | |
| 0 | NORCAPSAICINE | Fruit | -- | -- | | |
| 0 | NORDIHYDROCAPSAICIN | Fruit | 15 | 335 | | |
| 0 | NORDIHYDROCAPSAICIN | Resin, Exudate, Sap | 31000 | 31000 | | |
| 6 | O-CRESOL | Fruit | -- | -- | | |
| 0 | OBTUSIFOLIOL | Seed | -- | -- | | |
| 0 | OCTANE | Fruit | -- | -- | | |
| 5 | OCTANOIC-ACID | Fruit | -- | -- | | |
| 18 | OLEIC-ACID | Fruit | 270 | 3582 | -0.4531374874534312 | |

| Activity Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|----------------|----------------------|------------|---------|----------|----------------------|--|
| 18 | OLEIC-ACID | Seed | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 9 | OXALIC-ACID | Fruit | 257 | 1171 | -0.24177730392475322 | Watt, J.M. and Breyer-Brandwijk, M.G. 1962. The Medicinal and Poisonous Plants of Southern and Eastern Africa. E. & S. Livingstone, Ltd. Edinburg & London. 1457 pp. |
| 0 | P-AMINO-BENZALDEHYDE | Root | 6 | 6 | | |
| 25 | P-COUMARIC-ACID | Fruit | 79 | 79 | -0.3401508451648206 | |
| 8 | P-CRESOL | Fruit | -- | -- | | |
| 16 | P-CYMENE | Fruit | -- | -- | | |
| 0 | P-XYLENE | Fruit | -- | -- | | |
| 13 | PALMITIC-ACID | Fruit | 500 | 6820 | -0.2593626333971022 | |
| 13 | PALMITIC-ACID | Seed | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |

| Activity Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|----------------|-----------------------|----------------|---------|----------|-----------------------|---|
| 2 | PALMITOLEIC-ACID | Fruit | 30 | 409 | -0.27067772308159505 | USDA's Ag Handbook 8 and sequelae) |
| 11 | PANTOTHENIC-ACID | Fruit | -- | 5 | -0.8358850147292255 | USDA's Ag Handbook 8 and sequelae) |
| 0 | PENTADECANE | Fruit | -- | -- | | Chemical Constituents of Oriental Herbs (3 diff. books) |
| 1 | PENTADECANOIC-ACID | Fruit | -- | -- | | Chemical Constituents of Oriental Herbs (3 diff. books) |
| 26 | PHENOL | Fruit | -- | -- | | |
| 7 | PHENYLALANINE | Fruit | 260 | 3546 | 0.07637278495697446 | USDA's Ag Handbook 8 and sequelae) |
| 0 | PHOSPHATIDYL-GLYCEROL | Fruit | -- | -- | | |
| 0 | PHOSPHATIDYL-GLYCEROL | Leaf | -- | -- | | |
| 0 | PHOSPHODIESTERASE | Tissue Culture | -- | -- | | |
| 4 | PHOSPHORUS | Fruit | 784 | 3040 | -0.053456578480128816 | |
| 5 | PHYLLOQUINONE | Fruit | 0.02 | 0.06 | -0.22359887323159108 | |
| 0 | PHYTOENE | Fruit | -- | -- | | |
| 0 | PHYTOFLUENE | Fruit | -- | -- | | |

| Activity Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|----------------|---------------------------|----------------|---------|----------|---------------------|---|
| 2 | PHYSTOSTEROLS | Fruit | 90 | 1750 | 1.0365836878419545 | Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.) |
| 10 | PIPERIDINE | Fruit | 5.2 | 5.2 | -1.4134560119817663 | |
| 0 | PORPHOBILINOGEN-OXYGENASE | Leaf | -- | -- | | |
| 14 | POTASSIUM | Fruit | 3483 | 13500 | -0.3907443973119217 | |
| 0 | PROLINE | Fruit | 370 | 5047 | 0.28544185332563193 | |
| 6 | PROPIONIC-ACID | Fruit | -- | -- | | |
| 0 | PROTEIN | Fruit | 35862 | 139000 | 0.3954798997595693 | |
| 28 | PULEGONE | Fruit | -- | -- | | Chemical Constituents of Oriental Herbs (3 diff. books) |
| 3 | PYRIDINE | Fruit | -- | -- | | |
| 1 | PYRROLIDINE | Fruit | 1.4 | 1.4 | | |
| 15 | RIBOFLAVIN | Fruit | -- | 19 | 2.9963413996709614 | |
| 6 | RISHITIN | Tissue Culture | -- | -- | | |
| 0 | RUBIDIUM | Fruit | 0.38 | 10 | -0.6798204139542442 | ACTA AGRIC SCAND SUPPL 22: 1980 |
| 1 | RUBIXANTHIN | Fruit | -- | -- | | |

| Activity Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|----------------|---------------------------|------------|---------|----------|----------------------|--|
| 87 | RUTIN | Fruit | -- | 3874 | -0.21269509917042856 | Varnaite, R. 1988. Rutin Content in Capsicum, Capsella, Urtica, Primula, Lepidium, Lactuca, Brassica, Anethum, Beta, Petroselinum, Allium Genera Representatives. Liet Tsr Mokslu Akad Darb Ser C, 4: 29-32. |
| 5 | SABINENE | Fruit | -- | -- | | |
| 7 | SALICYLATES | Fruit | 6 | 100 | -0.04999562500039605 | |
| 44 | SCOPOLETIN | Fruit | -- | -- | | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses |
| 60 | SELENIUM | Fruit | 0.001 | 0.002 | -0.38569128420884563 | |
| 1 | SERINE | Fruit | 340 | 4638 | 0.351286486996007 | |
| 4 | SILICON | Fruit | -- | -- | | |
| 3 | SILVER | Fruit | 0.071 | 0.1 | -0.45980626251045253 | |
| 0 | SKATOLE-PYRROLO-OXYGENASE | Leaf | -- | -- | | |
| 1 | SODIUM | Fruit | 152 | 590 | -0.12800174907287107 | |

| Activity Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|----------------|--------------|------------|---------|----------|---------------------|--|
| 5 | SOLANIDINE | Fruit | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 26 | SOLANINE | Fruit | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 26 | SOLANINE | Leaf | 500 | 500 | -1 | |
| 18 | SOLASODINE | Fruit | -- | -- | | CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses |
| 8 | STEARIC-ACID | Fruit | 160 | 2180 | -0.1346481609392678 | USDA's Ag Handbook 8 and sequelae) |
| 8 | STEARIC-ACID | Seed | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 12 | STIGMASTEROL | Fruit | 10 | 180 | 1.3242602946608402 | |

| Activity Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|----------------|---------------------------------|------------|---------|----------|----------------------|--|
| 0 | STRONTIUM | Fruit | 2 | 12 | -0.9119954010869392 | |
| 0 | SUGARS | Fruit | 18060 | 70000 | -0.5952549612598248 | |
| 0 | SULFOQUINOVOSYL-DIACYL-GLYCEROL | Fruit | -- | -- | | |
| 0 | SULFOQUINOVOSYL-DIACYL-GLYCEROL | Leaf | -- | -- | | |
| 14 | SULFUR | Fruit | 190 | 2440 | 0.7136799213892123 | |
| 23 | TERPINEN-4-OL | Fruit | -- | -- | | |
| 9 | TERPINOLENE | Fruit | -- | -- | | |
| 0 | TETRADECANE | Fruit | -- | -- | | Chemical Constituents of Oriental Herbs (3 diff. books) |
| 22 | TETRAMETHYL-PYRAZINE | Fruit | -- | -- | | |
| 31 | THIAMIN | Fruit | 1 | 15 | 1.237464316955986 | USDA's Ag Handbook 8 and sequelae) |
| 0 | THIAMINE | Fruit | 1 | 4.2 | 0.35249803327962026 | |
| 4 | THREONINE | Fruit | 310 | 4228 | 0.5031132526815597 | |
| 4 | TIN | Fruit | 1.3 | 5 | -0.3575360694452028 | |
| 0 | TITANIUM | Fruit | 0.355 | 16 | -0.39196677622477016 | |
| 93 | TOCOPHEROL | Fruit | 24 | 24 | -0.48930868112103443 | ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes. |

| Activity Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|----------------|----------------------------------|------------|---------|----------|----------------------|--|
| 1 | TOLUENE | Fruit | -- | -- | | |
| 15 | TRIGONELLINE | Seed | 0.6 | 0.6 | -0.46893261236098505 | |
| 29 | TRYPTOPHAN | Fruit | 110 | 1500 | 0.911613449940336 | USDA's Ag Handbook 8 and sequelae) |
| 0 | TRYPTOPHAN-PYRROLO-OXYGENASE | Leaf | -- | -- | | |
| 8 | TYROSINE | Fruit | 180 | 2455 | 0.01503141767564613 | USDA's Ag Handbook 8 and sequelae) |
| 3 | VALINE | Fruit | 360 | 4910 | 0.09429171805261376 | |
| 0 | VANILLIC-ACID-4-BETA-D-GLUCOSIDE | Fruit | -- | -- | | |
| 0 | VANILLOYL-GLUCOSE | Fruit | -- | -- | | |
| 0 | VANILLYL-CAPROYLAMIDE | Fruit | -- | -- | | |
| 0 | VANILLYL-DECANAMIDE | Fruit | -- | -- | | |
| 0 | VANILLYL-OCTANAMIDE | Fruit | -- | -- | | |
| 2 | VIOLAXANTHIN | Fruit | 2 | 205 | | |
| 0 | VIT-B-6 | Fruit | 2 | 22 | 2.3189606682135615 | USDA's Ag Handbook 8 and sequelae) |
| 0 | WATER | Fruit | 742000 | 937000 | 0.7236282753600269 | |
| 3 | XANTHOPHYLL | Plant | -- | -- | | J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991. |

| Activity Count | Chemical | Plant Part | Low PPM | High PPM | StdDev | Reference Citation |
|----------------|---------------------|------------|---------|----------|----------------------|--|
| 0 | XANTHOPHYLL-EPOXIDE | Fruit | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 3 | XYLOSE | Fruit | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| 5 | ZEAXANTHIN | Fruit | 1.4 | 1525 | 1 | |
| 0 | ZETA-CAROTENE | Fruit | -- | -- | | |
| 77 | ZINC | Fruit | 2 | 7.7 | -0.6799873909506287 | |
| 0 | ZIRCONIUM | Fruit | 1.4 | 2 | -0.33411717815403996 | |